

Am



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,293	01/21/2000	Dirk A. Krieger	A-67845/JAS	5656

7590 04/09/2004

JAMES A. SHERIDAN  
MOSER, PATTERSON & SHERIDAN L.L.P  
595 SHREWSURY AVENUE  
SUITE 100  
SHREWSBURY, NJ 07702

EXAMINER
----------

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/489,293

Applicant(s)

KRIEGER ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear the terminology “therebetween” is meaning in the claims. More clarification is needed.

Moreover, in claim 1, it is disclose “and cooperating with the thrust plate to define a fluid thrust bearing”. What is cooperating with the thrust plate, the sleeve?

Shaft?

Also, the term “adapted to” is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchinson, 69 USPQ 138.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oku (US 6,097,121) in view of Moritan et al (5,822,846) and Kunze et al (US 5,743,015).

Oku discloses a spindle motor for use in a disc drive comprising a shaft 20, a sleeve surrounding the shaft and adjacent the thrust plate 40, a counterplate 42 and supported between upraised axial arms of said sleeve (see figure 1).

Also, the shaft is fixed and the sleeve and counterplate rotate relative to the shaft.

Moreover, the sleeve supports a hub 18 and the counterplate and sleeve are fixed to the base 4. Moreover, Oku discloses that the counterplate 42 and the thrust plate 40 are able to retain fluid 44, 46 in between (column 4, line 8).

However, Oku does not disclose that the counterplate is welded to the sleeve.

On the other hand, Moritan et al discloses for the purpose of discharging confined air from the bearing and avoid lubricant leakage that the counter plate 22 can be welded to parts of the motor such as the sleeve 27 (see figure 2a, column 2, lines 9-11).

Moreover, Kunze et al discloses for the purpose of securing effectively a shaft rapidly and reliably in a hole in a metal mounting plate in an axial position

that it is well known in the art the use of welding for the advantages it provides.

For example, the sleeve 4 is mention to be welded to a plate 1, which may serve as a counterplate (see abstract) & figure 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a spindle motor as disclosed by Oku and to modify the invention by welding the counter plate to the motor for the purpose of discharging confined air from the bearing and avoid lubricant leakage as disclosed by Moritan et al and to further disclose the use of welding a plate to a sleeve for the purpose of securing effectively a shaft rapidly and reliably in a hole in a metal mounting plate in an axial position as disclosed by Kunze et al.

### ***Response to Arguments***

5. Applicant's arguments filed 01/12/04 have been fully considered but they are not persuasive.

Moritan et al disclose strong motivations such as obtaining “more height saving configurations”, “achieve precise assembling”, etc (column 2, lines 10, 11, 15-20) for welding parts like plates to sleeve metal. Moreover, Moritan et al teaches “integration of the thrust plate with a sleeve metal of the bearing” (column 2, line 10, 11). It would have been obvious to one having ordinary skill in the art

to weld a plate to the sleeve since it is well known technique in art and such technique provide desirable advantages that are disclosed by Moritan et al.

Kunze et al, also teaches that by welding metal sleeves to metal mounting plates, which can be applied to a counterplates, other advantages can be obtain such as getting small disturbing forces exerted on the shaft-bearing bush, “welding does not affect the axial alignment”, “is far more reliable than an adhesive joint, particularly in the case of large temperature fluctuations” (column 1, lines 57, 61-63; column 1, lines 67-column 2, line 2; column 2, lines 6-12).

6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a thrust plate forms a thrust bearing between itself and the sleeve or shaft and counterplate and is supported from the shaft and teaching an assembly to avoid lubricant leakage) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

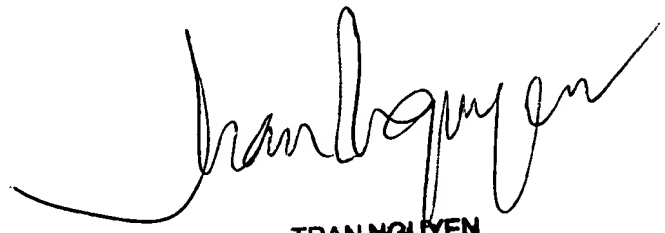
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



TRAN NGUYEN  
PRIMARY EXAMINER

Jcg

March 31, 2004